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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/465,994	12/16/1999	TAO YE	SUNIP507	9656
22434	7590	02/04/2004	EXAMINER	
BEYER WEAVER & THOMAS LLP P.O. BOX 778 BERKELEY, CA 94704-0778			PHAM, THOMAS K	
			ART UNIT	PAPER NUMBER
			2121	

DATE MAILED: 02/04/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/465,994

Applicant(s)

YE ET AL.

Examiner

Thomas K Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20, 23-25 and 30-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20, 23-25 and 30-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Response to Amendment

1. This action is in response to request for continued examination (RCE) filed on 1/20/2004. Claims 20, 23-25 and 30-37 are pending.
2. The indicated allowability in prior office action of claims 20 and 23-25 are withdrawn in view of the newly discovered reference(s) to Judge et al. U.S. Patent no. 6,430,570. Rejections based on the newly cited reference(s) follow.

DETAILED ACTION

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 20, 23-25 and 30-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Judge et al. U.S. Patent no. 6,430,570 (hereinafter Judge-570).

Regarding claim 20

Judge-570 teaches

A computer program product for managing execution of an application according to an application lifecycle (col. 7 lines 12-18, "Once executing, Application Manager 24 ... lifecycle of the instant application"), the computer program product comprising: a computer-readable

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medium storing computer-readable instructions thereon, the computer-readable instructions including:

- instructions for starting execution of the application such that the application enters an active state (col. 3 lines 57-61, "Application Manager 24 ... application class files 40 to life");
- instructions for pausing the execution of the application such that the application enters the paused state (col. 4 lines 24-25, "Application Manager 24 provides ... memory management capabilities");
- instructions for terminating the application such that the application enters a destroyed state (col. 7 lines 31-36, "the Application Manager 24 ... low- or no-memory condition"); and
- an interface including a set of instructions that enable a process other than the application to initiate execution of the instructions for starting execution of the application, the instructions for pausing the execution of the application, and the instructions for terminating the application (col. 4 lines 24-35, "Application Manager 24 provides ... management of the device 20"), wherein the interface comprises a stub adapted for calling the instructions for terminating the application, the stub being capable of accepting a parameter indicating that termination of the application is unconditional when the parameter is in a first state (col. 13 lines 29-35, "Stopping an ApplBase 514 ... termination by calling stop()") and conditional when the parameter is in a second state (col. 13 lines 8-28, "a stop operation begins ... instance to terminated").

Regarding claim 23

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Judge-570 teaches

A computer program product for managing execution of an application according to an application lifecycle (col. 7 lines 12-18, "Once executing, Application Manager 24 ... lifecycle of the instant application"), the computer program product comprising a computer-readable medium storing computer-readable instructions thereon, the computer-readable instructions including:

- instructions for communicating that the application has decided to terminate and has entered a destroyed state from a loaded state, a paused state, or an active state (col. 9 lines 23-30, "If a request is an unload() ... low- or no-memory is set 422");
- instructions for communicating that the application has decided to pause its execution and has entered the paused state from the active state (col. 4 lines 24-25, "Application Manager 24 provides ... memory management capabilities"); and
- instructions for obtaining information associated with a runtime environment of the application (col. 8 lines 15-20, "By calling the ... unloaded as well").

Regarding claim 24

Judge-570 teaches

A computer program product for managing execution of an application according to an application lifecycle (col. 7 lines 12-18, "Once executing, Application Manager 24 ... lifecycle of the instant application"), the computer program product comprising: a computer-readable medium storing computer-readable instructions thereon, the computer-readable instructions including:

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- instructions for communicating that the application has decided to terminate and has entered a destroyed state from a loaded state, a paused state, or an active state (col. 9 lines 23-30, "If a request is an unload() ... low- or no-memory is set 422");
- instructions for communicating that the application has decided to pause its execution and has entered the paused state from the active state (col. 4 lines 24-25, "Application Manager 24 provides ... memory management capabilities"); and
- an interface including a set of instructions that enable the application to initiate execution of the instructions for communicating that the application has decided to terminate (col. 13 lines 8-28, "a stop operation begins ... instance to terminated") and the instructions for communicating that the application has decided to pause its execution (col. 12 lines 47-52, "the result of the stop operation ... on embedded device 20").

Regarding claim 25

Judge-570 teaches

A computer program product for managing execution of an application according to an application lifecycle (col. 7 lines 12-18, "Once executing, Application Manager 24 ... lifecycle of the instant application"), the computer program product comprising a computer-readable medium storing computer-readable instructions thereon, the computer-readable instructions including:

- instructions for communicating that the application has decided to terminate and has entered a destroyed state from a loaded state, a paused state, or an active state (col. 9 lines 23-30, "If a request is an unload() ... low- or no-memory is set 422");

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- instructions for communicating that the application has decided to pause its execution and has entered the paused state from the active state (col. 4 lines 24-25, “Application Manager 24 provides ... memory management capabilities”);
- instructions for communicating that the application wishes to resume execution and enter the active state from the paused state (col. 6 lines 35-41, “Once a class ... take no arguments”); and
- an interface including a set of instructions that enable the application to initiate execution of the instructions for communicating that the application has decided to terminate (col. 13 lines 8-28, “a stop operation begins ... instance to terminated”), the instructions for communicating that the application has decided to pause its execution (col. 12 lines 47-52, “the result of the stop operation ... on embedded device 20”), and the instructions for communicating that the application wishes to resume execution and enter the active state from the paused state (col. 6 lines 35-41, “Once a class ... take no arguments”).

Regarding claim 30

Judge-570s teaches

An apparatus for managing execution of an application according to an application lifecycle (col. 7 lines 12-18, “Once executing, Application Manager 24 ... lifecycle of the instant application”), comprising:

- means for starting execution of the application such that the application enters an active state (col. 3 lines 57-61, “Application Manager 24 ... application class files 40 to life”);

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- means for pausing the execution of the application such that the application enters the paused state (col. 4 lines 24-25, "Application Manager 24 provides ... memory management capabilities");
- means for terminating the application such that the application enters a destroyed state (col. 7 lines 31-36, "the Application Manager 24 ... low- or no-memory condition"); and
- an interface including a set of instructions that enable a process other than the application to initiate the means for starting execution of the application, the means for pausing the execution of the application, and the means for terminating the application (col. 4 lines 24-35, "Application Manager 24 provides ... management of the device 20"), wherein the interface comprises a stub adapted for initiating the means for terminating the application, the stub being capable of accepting a parameter indicating that termination of the application is unconditional when the parameter is in a first state (col. 13 lines 29-35, "Stopping an ApplBase 514 ... termination by calling stop()") and conditional when the parameter is in a second state (col. 13 lines 8-28, "a stop operation begins ... instance to terminated").

Regarding claim 31

Judge-570 teaches

An apparatus for managing execution of an application according to an application lifecycle (col. 7 lines 12-18, "Once executing, Application Manager 24 ... lifecycle of the instant application"), comprising: a processor; and a memory, at least one of the processor and the memory (fig. 1, element 12) being adapted for:

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- starting execution of the application such that the application enters an active state (col. 3 lines 57-61, "Application Manager 24 ... application class files 40 to life");
- pausing the execution of the application such that the application enters the paused state (col. 4 lines 24-25, "Application Manager 24 provides ... memory management capabilities"); and
- terminating the application such that the application enters a destroyed state (col. 7 lines 31-36, "the Application Manager 24 ... low- or no-memory condition"); and
- an interface including a set of instructions that enable a process other than the application to initiate the starting execution of the application, the pausing the execution of the application, and the terminating the application (col. 4 lines 24-35, "Application Manager 24 provides ... management of the device 20"), wherein the interface comprises a stub adapted for initiating the terminating the application, the stub being capable of accepting a parameter indicating that termination of the application is unconditional when the parameter is in a first state (col. 13 lines 29-35, "Stopping an ApplBase 514 ... termination by calling stop()") and conditional when the parameter is in a second state (col. 13 lines 8-28, "a stop operation begins ... instance to terminated").

Regarding claim 32

Judge-570 teaches

An apparatus for managing execution of an application according to an application lifecycle (col. 7 lines 12-18, "Once executing, Application Manager 24 ... lifecycle of the instant application") comprising:

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- means for communicating that the application has decided to terminate and has entered a destroyed state from a loaded state, a paused state, or an active state (col. 9 lines 23-30, “If a request is an unload() ... low- or no-memory is set 422”);
- mean for communicating that the application has decided to pause its execution and has entered the paused state from the active state (col. 4 lines 24-25, “Application Manager 24 provides ... memory management capabilities”); and
- means for obtaining information associated with a runtime environment of the application (col. 8 lines 15-20, “By calling the ... unloaded as well”).

Regarding claim 33

Judge-570 teaches

An apparatus for managing execution of an application according to an application lifecycle (col. 7 lines 12-18, “Once executing, Application Manager 24 ... lifecycle of the instant application”), comprising: a processor; and a memory, at least one of the processor and the memory (fig. 1, element 12) being adapted for:

- communicating that the application has decided to terminate and has entered a destroyed state from a loaded state, a paused state, or an active state (col. 9 lines 23-30, “If a request is an unload() ... low- or no-memory is set 422”);
- communicating that the application has decided to pause its execution and has entered the paused state from the active state (col. 4 lines 24-25, “Application Manager 24 provides ... memory management capabilities”); and
- obtaining information associated with a runtime environment of the application (col. 8 lines 15-20, “By calling the ... unloaded as well”).

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Regarding claim 34

Judge-570 teaches

An apparatus for managing execution of an application according to an application lifecycle (col. 7 lines 12-18, “Once executing, Application Manager 24 ... lifecycle of the instant application”), comprising:

- means for communicating that the application has decided to terminate and has entered a destroyed state from a loaded state, a paused state, or an active state (col. 9 lines 23-30, “If a request is an unload() ... low- or no-memory is set 422”);
- means for communicating that the application has decided to pause its execution and has entered the paused state from the active state (col. 4 lines 24-25, “Application Manager 24 provides ... memory management capabilities”); and
- an interface including a set of instructions that enable the application to initiate the means for communicating that the application has decided to terminate and the means for communicating that the application has decided to pause its execution (col. 4 lines 24-35, “Application Manager 24 provides management of the device 20”).

Regarding claim 35

Judge-570 teaches

An apparatus for managing execution of an application according to an application lifecycle (col. 7 lines 12-18, “Once executing, Application Manager 24 ... lifecycle of the instant application”), comprising: a processor; and a memory, at least one of the processor and the memory (fig. 1, element 12) being adapted for:

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- communicating that the application has decided to terminate and has entered a destroyed state from a loaded state, a paused state, or an active state (col. 9 lines 23-30, “If a request is an unload() ... low- or no-memory is set 422”); and
- communicating that the application has decided to pause its execution and has entered the paused state from the active state (col. 4 lines 24-25, “Application Manager 24 provides ... memory management capabilities”); and
- an interface including a set of instructions that enable the application to initiate the communicating that the application has decided to terminate and the communicating that the application has decided to pause its execution (col. 4 lines 24-35, “Application Manager 24 provides ... management of the device 20”).

Regarding claim 36

Judge-570 teaches

An apparatus for managing execution of an application according to an application lifecycle (col. 7 lines 12-18, “Once executing, Application Manager 24 ... lifecycle of the instant application”), comprising:

- means for communicating that the application has decided to terminate and has entered a destroyed state from a loaded state, a paused state, or an active state (col. 9 lines 23-30, “If a request is an unload() ... low- or no-memory is set 422”);
- means for communicating that the application has decided to pause its execution and has entered the paused state from the active state (col. 4 lines 24-25, “Application Manager 24 provides ... memory management capabilities”);

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- means for communicating that the application wishes to resume execution and enter the active state from the paused state (col. 6 lines 35-41, "Once a class ... take no arguments"); and
- means for enabling the application to initiate the means for communicating that the application has decided to terminate (col. 13 lines 8-28, "a stop operation begins ... instance to terminated"), the means for communicating that the application has decided to pause its execution (col. 12 lines 47-52, "the result of the stop operation ... on embedded device 20"), and the means for communicating that the application wishes to resume execution and enter the active state from the paused state (col. 6 lines 35-41, "Once a class ... take no arguments").

Regarding claim 37

Judge-570 teaches

An apparatus for managing execution of an application according to an application lifecycle (col. 7 lines 12-18, "Once executing, Application Manager 24 ... lifecycle of the instant application"), comprising: a processor; and a memory, at least one of the processor and the memory (fig. 1, element 12) being adapted for:

- communicating that the application has decided to terminate and has entered a destroyed state from a loaded state, a paused state, or an active state (col. 9 lines 23-30, "If a request is an unload() ... low- or no-memory is set 422");
- communicating that the application has decided to pause its execution and has entered the paused state from the active state (col. 4 lines 24-25, "Application Manager 24 provides ... memory management capabilities"); and

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- communicating that the application wishes to resume execution and enter the active state from the paused state (col. 6 lines 35-41, "Once a class ... take no arguments"); and
- an interface including a set of instructions that enable the application to initiate the communicating that the application has decided to terminate (col. 13 lines 8-28, "a stop operation begins ... instance to terminated"), the communicating that the application has decided to pause its execution (col. 12 lines 47-52, "the result of the stop operation ... on embedded device 20"), and the communicating that the application wishes to resume execution and enter the active state from the paused state (col. 6 lines 35-41, "Once a class ... take no arguments").

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner *Thomas Pham*; whose telephone number is (703) 305-7587 and fax number is (703) 746-8874, Monday-Thursday and every other Friday from 7:30AM- 5:00PM EST or contact Supervisor *Mr. Anil Khatri* at (703) 305-0282.

Any response to this office action should be mailed to: **Director of Patents and Trademarks Washington, D.C. 20231**, or **Hand-delivered** responses should be brought to **Crystal Park II, 2121 Crystal Drive Arlington, Virginia, (Receptionist located on the 4th floor)**, or fax to the **official fax number (703) 872- 9306**.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Thomas Pham
Patent Examiner

TP

February 2, 2004



ANIL KHATRI
SUPERVISORY PATENT EXAMINER